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CAS CHEMICAL

Thermal Transfer Ribbon

- Excellent color development and clarity
- Low power printing to protect the printer head
- Expertise and technology as a film coating specialist
- Domestic capital and domestic technology

CAS Website

CAS CHEMICAL

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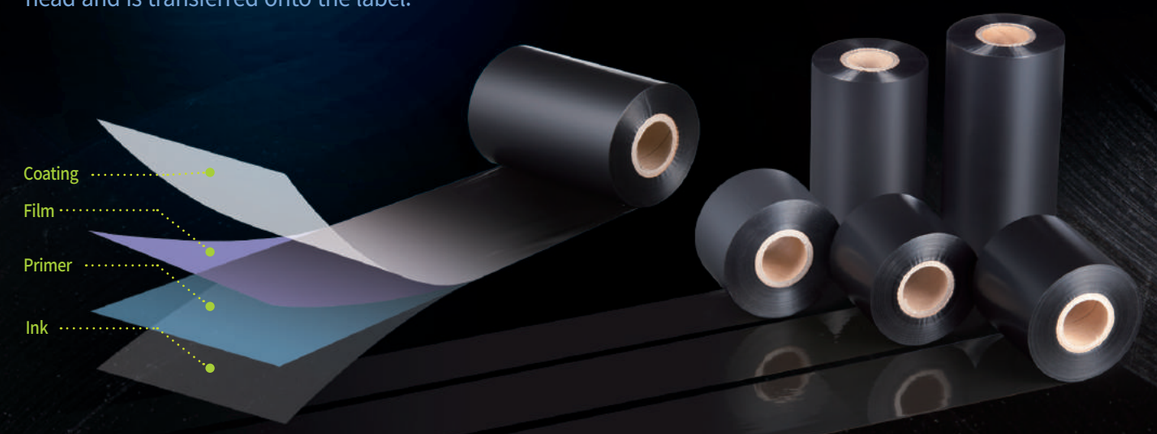
PREMIUM QUALITY & LOW PRICE

Thermal Transfer Ribbon

What is a Thermal Transfer Ribbon?

Thermal transfer ribbon refers to a printing method where the ink coated on the ribbon in solid form melts due to the heat applied by the printer head and is transferred onto the label.



Applications and Features

- Manufacturers using thermal transfer printers and manufacturers requiring label issuance
- High resolution, high-speed printing, capable of printing on various labels
- Used in numerous industries such as inventory management, shipping packaging, pharmaceuticals, cosmetics, food, electronics, distribution, clothing, and automotive
- As a disposable consumable, it is advantageous from the manufacturer's perspective

CAS Chemical, the only coating specialized company that is based in domestic capital and domestic technology.

CAS Chemical is the only coating specialist company built with domestic capital and technology. It has been recognized for its highest level of technology by developing its own ink and back-coating solutions. This minimizes printer head damage, reducing the cost and effort of head replacement. The company maintains the best quality through various quality checks on printability, durability, static electricity prevention, printing speed, noise, printer compatibility, and label adaptability.

CAS Chemical Manufacturing Process

CAS Chemical continuously strives to add greater value for its customers. It has a computer-controlled system that oversees all stages from raw materials to final products. The unique coating system and back-coating technology of CAS enable the integration of ink production and ink coating processes, ensuring product quality maintenance and low-cost production.

1. In-Line Ink Manufacturing

Computer-controlled system oversees ink manufacturing equipment and coating station facilities, ensuring the production of high-quality, stable ink.

2. Coating Technology

By applying innovative back-coating technology, CAS produces thermal transfer ribbons with excellent printability and printer head protection effects.

3. Converting Process

Reliable converting equipment allows consistent quality product production, transforming jumbo rolls into finished (slit) rolls.

Ink Manufacturing Equipment

Coater Head

UN-Winder

RE-Winder

Dryer

Converting Process

Major Partners

WAX | CCR 10T

Standard Wax Ribbon for Flat Head

WAX	**CCR 10T** CCR 10
WAX/RESIN	CCR 30 CCR 42
RESIN	CCR 52 CCR 55

CCR10T is an ECO-WAX product.

- CCR10T is designed to operate with most flat head and edge printers in various work environments.
- CCR10T can print clear barcodes and high-resolution images.
- It can print at low energy, extending the life of the print head.
- Among WAX products, it has characteristics that allow use in various environments at an affordable price.

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Performance

Print performance and durability

Horizontal Barcode	90 (0–100)	Optical Density of Transmittance	1.7 (0–2.0)	Durability (600g load reciprocation test)	50 (0–100)
Vertical Barcode	100 (0–100)			Chemical Resistance (600g load, alcohol test)	30 (0–100)

Product Specifications

Description	CCR 10T
Ink Type	WAX
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	3.1 ± 0.2
Total Thickness (㎛)	7.60 ± 0.3
Ink Density	1.7 ± 0.2
Ink Melting Temperature	65°C
Printer Head Type	FLAT / EDGE
Recommended Printing Speed	4~8 IPS
Recommended Printing Density	65%

WAX | CCR 10

Standard Wax Ribbon for Flat Head

WAX	CCR 10T **CCR 10**
WAX/RESIN	CCR 30 CCR 42
RESIN	CCR 52 CCR 55

CCR10 is a PREMIUM WAX product.

- CCR10 is designed to operate with most flat head and edge printers in various work environments.
- CCR10 can print clear barcodes and high-resolution images.
- CCR10 can be applied to various ART, YUPO, and PP type label papers.
- Among WAX products, it has the strongest durability and universal printability characteristics.

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Performance

Print performance and durability

Horizontal Barcode	85 (0–100)	Optical Density of Transmittance	1.7 (0–2.0)	Durability (600g load reciprocation test)	50 (0–100)
Vertical Barcode	100 (0–100)			Chemical Resistance (600g load, alcohol test)	50 (0–100)

Product Specifications

Description	CCR 10
Ink Type	WAX
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	2.8 ± 0.2
Total Thickness (㎛)	7.30 ± 0.3
Ink Density	1.6 ± 0.2
Ink Melting Temperature	67°C
Printer Head Type	FLAT / EDGE
Recommended Printing Speed	4~10 IPS
Recommended Printing Density	65%

WAX/RESIN | CCR 30

Wax/Resin Ribbon for Flat Head

WAX	CCR 10T CCR 10
WAX/RESIN	**CCR 30** CCR 42
RESIN	CCR 52 CCR 55

CCR30 is a Standard WAX/RESIN product.

- CCR30 is designed to operate with most flat head printers in various work environments.
- CCR30 can print clear barcodes and high-resolution images.
- CCR30 can be applied to various ART and PP type label papers.
- Among WAX/RESIN products, it has excellent scratch and abrasion resistance characteristics.

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Performance

Print performance and durability

Horizontal Barcode	85 (0–100)	Optical Density of Transmittance	1.7 (0–2.0)
Durability (600g load reciprocation test)	65 (0–100)		
Vertical Barcode	100 (0–100)		
Chemical Resistance (600g load, alcohol test)	60 (0–100)		

Product Specifications

Description	CCR 30
Ink Type	WAX / RESIN
Color	Black
Base Film Material	PET Film
Total Thickness (㎛)	6.8 ± 0.2
Optical Density (Reflection O.D)	1.25 ± 0.1
Printer Head Type	FLAT
Recommended Printing Speed	4 ~ 6IPS
Recommended Printing Density	60%

WAX/RESIN | CCR 42

Wax/Resin for Edge Head

WAX	CCR 10T CCR 10
WAX/RESIN	CCR 30 **CCR 42**
RESIN	CCR 52 CCR 55

CCR42 is a WAX/RESIN NEAR EDGE product.

- CCR42 is designed to operate with edge head printers as a wax/resin type.
- CCR42 can print clear barcodes and high-resolution images.
- CCR42 can be applied to various YUPO and PP type label papers.
- Among WAX/RESIN products, it has excellent scratch and abrasion resistance characteristics.

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Performance

Print performance and durability

Horizontal Barcode	85 (0–100)	Optical Density of Transmittance	1.5 (0–2.0)
Durability (600g load reciprocation test)	50 (0–100)		
Vertical Barcode	85 (0–100)		
Chemical Resistance (600g load, alcohol test)	50 (0–100)		

Product Specifications

Description	CCR 42
Ink Type	WAX / RESIN
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	1.3 ± 0.2
Total Thickness (㎛)	5.80 ± 0.2
Ink Density	1.0 ± 0.1
Ink Melting Temperature	67°C
Printer Head Type	EDGE
Recommended Printing Speed	4~14 IPS
Recommended Printing Density	60%

RESIN | CCR 52

Resin Ribbon for Flat Head

WAX	CCR 10T CCR 10
WAX/RESIN	CCR 30 CCR 42
RESIN	**CCR 52** CCR 55

CCR52 is a Standard RESIN product.

- CCR52 is designed to operate with flat head printers as a resin type product.
- CCR52 can be applied to various YUPO, PP, PET type label papers.
- It has excellent durability against repeated abrasion (scratching).
- It also has excellent chemical durability against various solvents.

Usage Environment

Automotive and electronic product (component) labels, laboratory labels, hospital (medical) labels, hazardous material labels, shrink wrap labels

Product Performance

Print performance and durability

Horizontal Barcode 85 (0–100)	Optical Density of Transmittance 1.7 (0–2.0)	Durability (600g load reciprocation test) 95 (0–100)	
Vertical Barcode 70 (0–100)		Chemical Resistance (600g load, alcohol test) 95 (0–100)	

Product Specifications

Description	CCR 52
Ink Type	RESIN
Color	Black
Base Film Material	PET Film
Total Thickness (㎛)	6.8 ± 0.2
Optical Density (Reflection O.D)	1.25 ± 0.1
Printer Head Type	FLAT
Recommended Printing Speed	4 ~ 6IPS
Recommended Printing Density	70%

RESIN NEAR EDGE | CCR 55

Resin for Edge Head

WAX	CCR 10T CCR 10
WAX/RESIN	CCR 30 CCR 42
RESIN	CCR 52 **CCR 55**

CCR55 is a Standard RESIN product.

- CCR55 is designed to operate with flat head and edge head printers as a resin type product.
- CCR55 can be applied to various YUPO, PP, PET type label papers.
- It has excellent durability against repeated abrasion (scratching).
- It also has excellent chemical durability against various solvents.

Usage Environment

Printing of manufacturing dates and expiration dates on food packaging materials (coffee bags, instant foods, cheese, snacks, price tags, tickets, etc.)

Product Performance

Print performance and durability

Horizontal Barcode 85 (0–100)	Optical Density of Transmittance 1.7 (0–2.0)	Durability (600g load reciprocation test) 90 (0–100)	
Vertical Barcode 85 (0–100)		Chemical Resistance (600g load, alcohol test) 90 (0–100)	

Product Specifications

Description	CCR 55
Ink Type	RESIN
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	0.9 ± 0.2
Total Thickness (㎛)	5.4 ± 0.2
Ink Density	0.76 ± 0.2
Ink Melting Temperature	70°C
Printer Head Type	EDGE
Recommended Printing Speed	4~14 IPS
Recommended Printing Density	70%

WAX/RESIN | B-110A

Wax/Resin Ribbon for Flat Head

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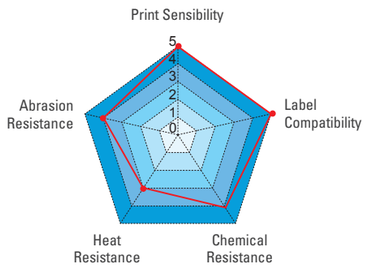

Features

- Excellent durability
- Wide label application range for wax and wax/resin environments
- Superior color development and clarity
- Effective on rough or porous surfaces
- Low power printing for ease of use and print head protection
- Anti-static function

Test Sample

Applicable Labels

Art paper, YUPO paper, Silver paper

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Specifications

Description	B-110A
Ink Type	WAX / RESIN
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	3.5 ± 0.2
Total Thickness (㎛)	8.0 ± 0.2
Ink Density	1.3 ± 0.2
Ink Melting Temperature	70°C
Printer Head Type	FLAT
Recommended Printing Speed	4~8 IPS
Recommended Printing Density	65%

RESIN | B-110CR

Resin Ribbon for Flat Head

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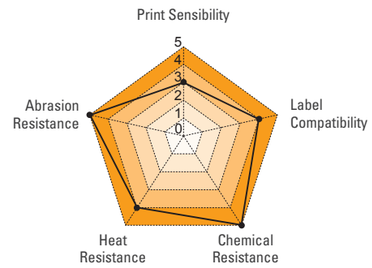

Features

- Excellent durability
- Superior color development and clarity
- Strong resistance to chemicals and UV exposure
- Low power printing for ease of use and print head protection
- Anti-static function

Test Sample

Applicable Labels

YUPO paper, Silver paper, PET, Vinyl

Usage Environment

Barcode labels, maritime and logistics inventory management, horticultural and pharmaceutical shelf or container labels, hospital (medical) labels, automotive and hazardous material labels, textile labels, product labels

Product Specifications

Description	B-110CR
Ink Type	RESIN
Color	Black
Base Film Material	PET Film
Base Film Thickness (㎛)	4.5 ± 0.2
Ink Thickness (㎛)	2.3 ± 0.2
Total Thickness (㎛)	6.8 ± 0.2
Ink Density	1.0 ± 0.1
Ink Melting Temperature	80°C
Printer Head Type	FLAT
Recommended Printing Speed	4~8 IPS
Recommended Printing Density	70%

WASH CARE RESIN | D-110A

Wash Care Resin Ribbon

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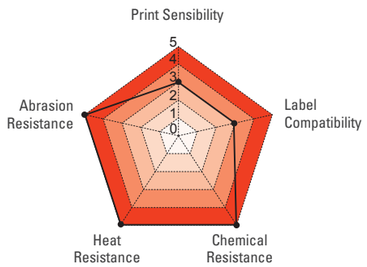

Features

- Excellent print quality on fabric materials
- Superior durability through washing, dry cleaning, and ironing
- High resistance to heat and sunlight exposure

Test Sample

Applicable Labels

Nylon for clothing care labels

Usage Environment

Garment industry (printing care labels for clothing)

Product Specifications

Description	D-110A
Ink Type	RESIN
Color	Black
Base Film Material	PET Film
Base Film Thickness (μm)	4.5 ± 0.2
Ink Thickness (μm)	2.3 ± 0.2
Total Thickness (μm)	6.8 ± 0.2
Ink Density	1.0 ± 0.1
Ink Melting Temperature	85°C
Printer Head Type	FLAT / EDGE
Recommended Printing Speed	4~10 IPS
Recommended Printing Density	70%

WASH CARE RESIN | D-310A

Wash Care Resin Ribbon

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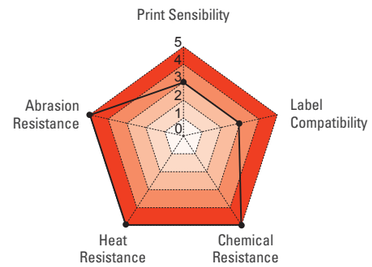


Features

- Excellent print quality on fabric materials
- Superior durability through washing, dry cleaning, and ironing
- High resistance to heat and sunlight exposure

Test Sample

Applicable Labels

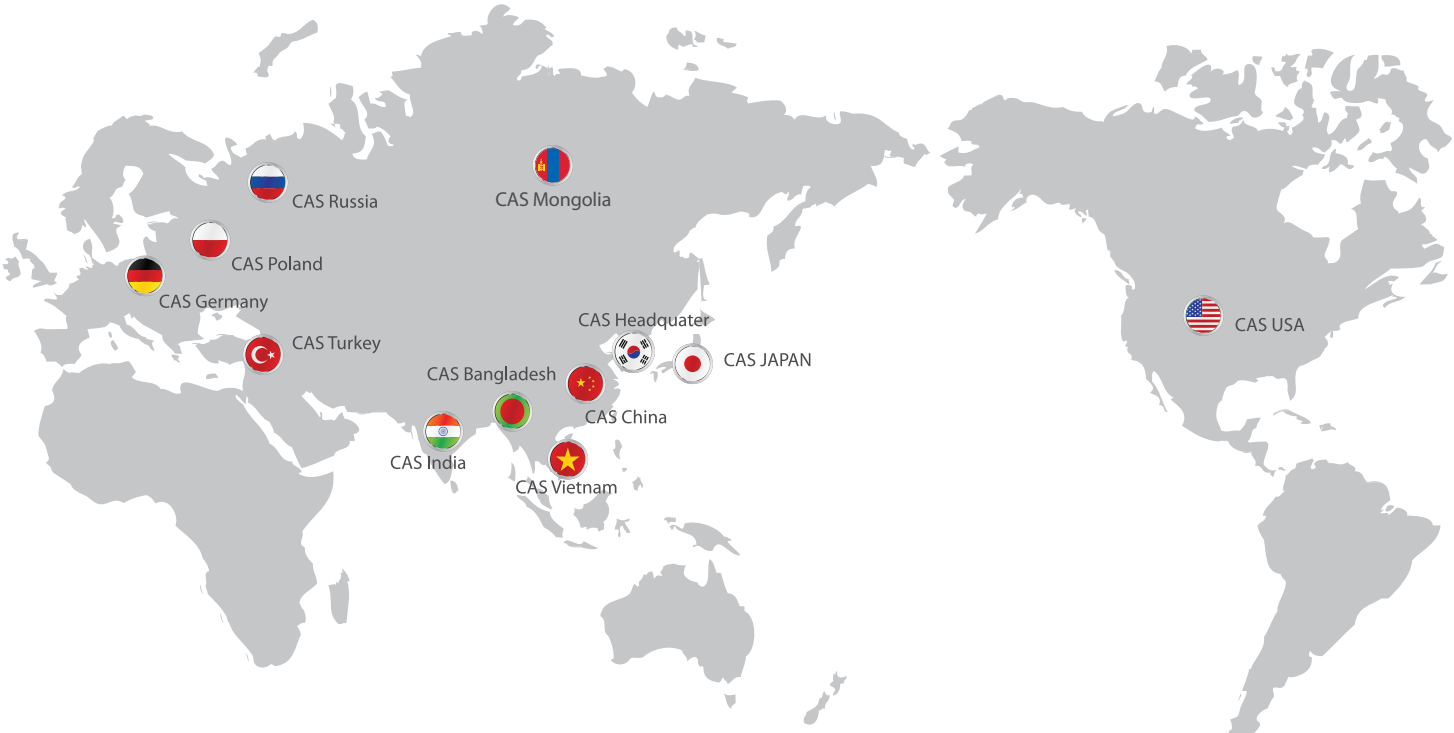
Nylon for clothing care labels

Usage Environment

Garment industry (printing care labels for clothing)

Product Specifications

Description	D-310A
Ink Type	RESIN
Color	Red
Base Film Material	PET Film
Base Film Thickness (μm)	4.5 ± 0.2
Ink Thickness (μm)	2.8 ± 0.2
Total Thickness (μm)	7.3 ± 0.2
Ink Density	0.64 ± 0.1
Ink Melting Temperature	85°C
Printer Head Type	FLAT / EDGE
Recommended Printing Speed	4~10 IPS
Recommended Printing Density	70%



GLOBAL NETWORK

CAS has obtained major certifications from various countries since its establishment in 1983.
Through 11 overseas production and sales bases and over 120 overseas trading partners, we are selling our products globally.
We plan to continuously strengthen our overseas business operations and pursue business stability and growth through enhanced strategies.

FACTORY, KOREA

CAS in CHINA

CAS CHEMICAL in KOREA

CAS in U.S.A

CAS in TÜRKIYE

CAS in INDIA

CAS CHEMICAL

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Ver 1.1_71604202